

REMARKS

The October 25, 2005 Official Action and references cited therein have been carefully reviewed. In light of the amendments presented herewith, the declaration under Rule 1.131 and the following remarks, favorable reconsideration and allowance of the application are respectfully requested.

Claims 28-36 stand rejected under 35 U.S.C. §112, second paragraph, for allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner has rejected claims 28-33 under 35 U.S.C. §102(e) for allegedly anticipated by US Patent 5,932,442 to Lal et al. (hereafter '442 patent).

At page 4, claims 34-36 stand rejected under U.S.C. §103(a) as allegedly unpatentable over the '442 patent in view of Sigma Immuno Chemicals 1993 Catalog (hereafter Sigma).

The foregoing constitutes the entirety of the rejections raised in the October 25, 2005 Official Action. In light of the present claim amendments, evidence and the following remarks, each of the above-noted rejections under 35 U.S.C. §§ 112, second paragraph, 102(e), and 103(a) is respectfully traversed.

I. CLAIMS 28-36 AS AMENDED ARE DEFINITE

The Examiner asserts that the use of laboratory designations only to identify a particular protein or protein fragment such as PD2 renders the claims indefinite, and that amendment of the claims to include the corresponding SEQ ID number would unambiguously define a given protein or protein fragment. Accordingly, as presented above, claims 28, 31, and 34 are amended to include SEQ ID NO: 2. Support for this amendment can be found throughout the present specification,

e.g., see the paragraph at page 4, line 7. No new matter has been introduced by the amendments presented herein.

Applicants, therefore, request that the rejection of claims 28-36 be withdrawn in light of the foregoing amendments.

II. CLAIMS 28-33 ARE NOT ANTICIPATED BY US PATENT 5,932,442 TO LAL ET AL.

It is respectfully submitted that the §102(e) rejection based on US the '442 patent should be withdrawn as the '442 patent is not properly citable against the claims of the present Application. Specifically, claims 28-33 of the present Application are drawn to an antibody specific for a human PD2 protein comprising the sequence of SEQ ID No: 2. The '442 patent discloses but does not claim a HRM protein of SEQ ID No: 9, which comprises a sequence identical to that of the PD2 protein of the present Application, and methods of raising antibodies thereto. Under the Patent and Trademark rules of practice, when any claim of a U.S. patent application is rejected on reference to a printed publication, the timely filing of a Declaration showing conception of the invention and reduction to practice in this country prior to the effective date of the reference, will remove the publication as a bar to the grant of a patent to the inventor. 37 C.F.R. §1.131(a).

Pursuant to 37 C.F.R. §1.131, there is submitted herewith a Declaration of Drs. Batra and Hollingsworth, which clearly establishes conception and reduction to practice of the claimed subject matter of the present application prior to the September 23, 1997 filing date of the '442 patent.

The data presented in the Exhibits accompanying the Declaration of Drs. Batra and Hollingsworth provides clear evidence of the inventors' conception and reduction to practice of the instantly claimed invention. Specifically, Exhibit A is

part of grant application submitted to the NIH by the current inventors describing the cloning of the PD2 cDNA and the sequencing of the PD2 cDNA and its coding protein. Also included in Exhibit A, is the purification of an anti-PD2 antibody (raised against PD2 peptide 2, corresponding to amino acids 327-348 of SEQ ID NO: 2) and its usage in Western blots, which shows that PD2 protein is overexpressed in the nuclear extracts and that the expression of PD2 protein is 30 fold higher in Pan1 cell line as compared to HPAF/CD11.

Exhibit B is a copy of the grant receipt received by the inventors.

All of the experiments set forth in the Exhibits were performed in the United States prior to the filing of the '442 patent.

In view of the clear evidence of conception and reduction to practice of the present invention prior to the September 1997 filing date of the '442 patent as set forth in the Declaration of Drs. Batra and Hollingsworth, the §102(e) rejection is clearly improper and should be withdrawn.

III. CLAIMS 34-36 ARE PATENTABLE OVER US PATENT 5,932,442 TO LAL ET AL. IN VIEW OF SIGMA IMMUNO CHEMICALS 1993 CATALOG

Claims 34-36 of the present Application are directed to kits for detecting human PD2 protein comprising an anti-PD2 antibody and optionally instructional material. It is noted that the Examiner's 35 U.S.C. §103(a) rejection of claim 34-36 is based on the combination of the '442 patent and Sigma Immuno Chemicals 1993 Catalog. However, as set forth in the M.P.E.P., at §2141.01 (II):

"... an obviousness rejection based on a publication which would be applied under 102(a) if it

anticipated the claims can be overcome by swearing behind the publication date of the reference by filing an affidavit or declaration under 37 CFR 1.131."

The Rule 1.131 Declaration described above provides clear evidence of conception and reduction to practice of the present invention prior to the September 1997 filing date of the '442 patent. Accordingly, the '442 patent is not properly citable against the claims of the present Application. Moreover, although Sigma teaches commercially available kits for monoclonal and polyclonal antibodies conjugated to various labels, it alone fails to teach human PD2 protein anti-PD2 immunologically specific antibodies. Accordingly, inasmuch as the Examiner has failed to establish a *prima facie* case of obviousness based on the combination of the '422 patent and the Sigma Catalog, the rejection of claims 34-36 cannot be maintained.

CONCLUSION

In view of the amendments and remarks presented herein, it is respectfully urged that the rejections set forth in the October 25, 2005 Official Action be withdrawn and that this application be passed to issue. In the event the Examiner is not persuaded as to the allowability of any claim, and it appears that any outstanding issues may be resolved through a telephone interview, the Examiner is requested to telephone the undersigned attorney at the phone number given below.

Respectfully submitted,

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Enclosures: Declaration under 37 C.F.R. §1.131